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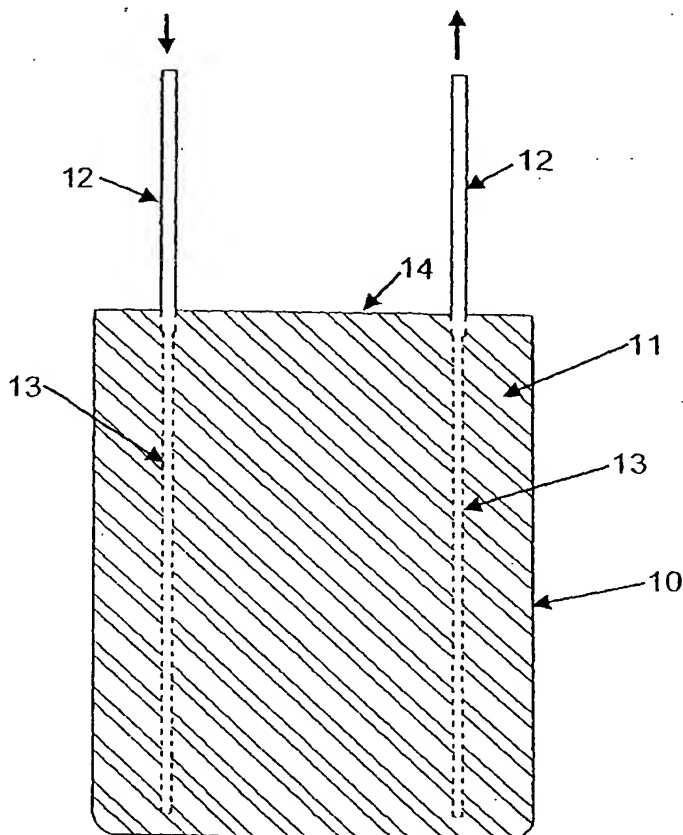
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[Continued on next page]

(54) Title: COMPACT MICRO-POROUS MEDIA DEVICE DEGASSING MOLTEN METAL



(57) Abstract: A degasser (10) for molten metal with a microporous plate (11). The microporous plate has at least one internal passageway (13) and an interface tube (12) attached to the microporous plate in flow communication with the internal passageway. In use the degasser is submerged entirely below the surface of the molten metal. Hydrogen is removed from the metal melt by diffusion of hydrogen atoms into the porous plate to form therein H₂ gas. Either a vacuum or a purge of inert gas removes hydrogen gas from the microporous plate through the interface tube (12). In a preferred embodiment the microporous plate has an internal cavity in flow communication with the interface tube(s).



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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA,

SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations
- of inventorship (Rule 4.17(iv)) for US only

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A. CLASSIFICATION OF SUBJECT MATTER

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Minimum documentation searched (classification system followed by classification symbols)

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Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	----- abstract	5, 25
A	GB 2 077 890 A (MORGAN REFRACTORIES LTD) 23 December 1981 (1981-12-23) abstract; figure 1	1, 13
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Y	----- US 3 743 500 A (FOULARD J ET AL) 3 July 1973 (1973-07-03) figure 1	25
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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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